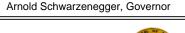
### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-013181 Address: 333 Burma Road **Date Inspected:** 07-Apr-2010

City: Oakland, CA 94607

**Project Name:** SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1190 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

**Bridge No:** 34-0006 **Component:** OBG

### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

**OBG** Assembly Yard

BK001-026

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 009 located at BK001-026 cantilever member. Welder is identified as Mr. Li Guimin (220069). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2231-Tc-U4b-F.

BK001-025

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 007 located at BK001-025 cantilever member. Welder is identified as Mr. Cheng Zhenhua (220067). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2231-Tc-U4b-F.

7CE

# WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 004 located at CA040 bike path side of segment. Welder is identified as Mr. Sun Lingling (048047). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and CWR1227 repair procedure.

Y Location of repairs areas by above noted welder (048047) is located at 11820 and 12110mm.

7AW + 7BW

Shield Metal Arc Welding (SMAW) VT repair welding was performed on various t stiffeners located on the side plates and bottom plate of segment. Welder is identified as Mr. Xu Changxue (066002). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-Repair-1.

Miscellaneous Work In Progress

QA Inspector observed ZPMC's personnel performing various job functions at Trail Assembly yard. Locations and description of work are as followed:

8CE

1. Observed segment being moved in the trail assembly yard for field splice fit up work.

7AE

1. Grit blasting of external areas of segment.

NDT Observation

This QA Inspector observed ZPMC Magnetic Particle Testing (MT) Technician performed MT on various locations in the trial assembly yard. Locations and indications are as followed:

8AW

1. Excavation on edge to deck plate weld joint at counter weight side of segment. Y locations are approximately 855~865mm mm (1 transverse indication), 1170mm (1 transverse indication), 2500mm, 3180~3465mm (9 transverse indications), 7150mm, 8060mm, 8270mm, 9995mm and 10180mm.

7CE

1. Excavation on edge to deck plate weld joint at bike path side of segment. Y locations are approximately 11820mm and 12110mm.

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

This QA Inspector observed ZPMC Ultra Sonic Testing (UT) Technician performed UT on various locations in the trial assembly yard. Locations are as followed:

7BE

1. Longitudinal diaphragm to floor beam web located at panel point 52 on the bike path side of segment.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





## **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (150-0042-2372), who represents the Office of Structural Materials for your project.

Inspected By:	Alaniz,Joe	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer